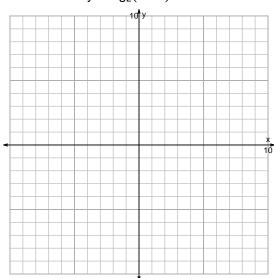
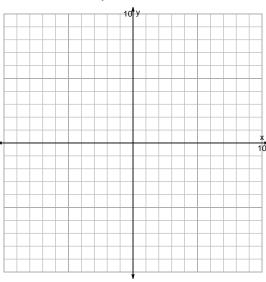
s18quiz: EXP LOG (Example v9)

1. Graph $y = \log_2(x+6) + 5$ and $y = 2^{x-5} - 3$ on the grids below. Also, draw any asymptotes with dotted lines.

$$y = \log_2(x+6) + 5$$



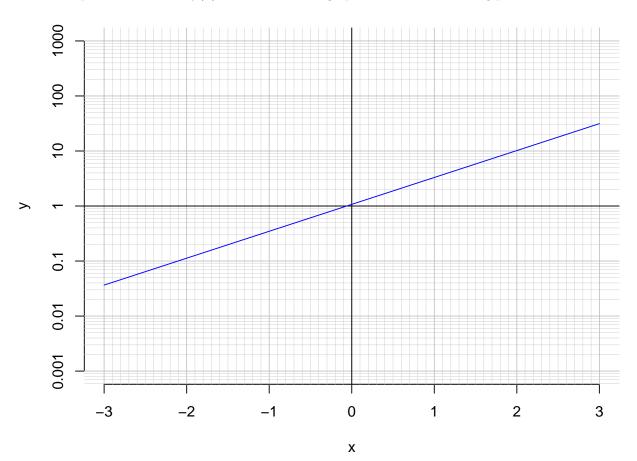
$$y = 2^{x-5} - 3$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$19 = \left(\frac{7}{3}\right) \cdot 10^{4t/5}$$

3. An exponential function $f(x) = 1.07 \cdot e^{1.13x}$ is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(2.6).

- b. Express $f^{-1}(x)$, the inverse of f.
- c. Using the plot above, evaluate $f^{-1}(0.09)$.